**Welcome to Atm Sci 100 (Online): Survey of Meteorology! (Fall 2019)**

|  |  |
| --- | --- |
| Instructor: | Austin R Harris |
| Office: | EMS 422W |
| E-mail: | harri377@uwm.edu (please use e-mail for any questions specific to you; please use the discussion forums for more general questions) |
| Office Hours: | By appointment |
| Course Prerequisites: | None |

**Course Description**

This one-term course is intended for prospective elementary school teachers, students majoring in business and engineering, the life and social sciences, and liberal arts. The goals of this course are to provide students with a broad overview of the behavior of the Earth’s atmosphere. The emphasis will be on the description of physical processes responsible for a wide variety of atmospheric phenomena. This course will enable students to begin to understand and appreciate the scientific basis for weather and climate prediction. The instructional level of the course is directed toward undergraduate non-science majors.

There are twelve modules in the course. Each module consists of lecture/reference material, supplemental resources, a post-module quiz, and a post-module discussion forum. **You are required to complete one module each week and keep pace with the completion dates**for the course. The "Course Summary" below this syllabus provides a listing of the due dates for all course materials, both graded and ungraded. **Again, please note the completion dates for each module - they are required.**The modules will close after the deadline so you must stay ahead of them.  However, if you wish to proceed through the course faster than the required timeline, you are free to do so.

**Course Grading**

Your total score in this course is broken down into: 1) your online lecture score (55%) and 2) your performance in the lab sections (45%). *Please note that you must pass the course lab in order to pass the course, independent of your grade for this lecture!* More information on the course lab is available in the syllabus that you will receive from your lab instructor. This online lecture is broken down further into:

Quizzes (70% of lecture; 38.5% of overall course): You are allowed to take each module’s ten question, six-minute quiz up to five times. There is an enforced minimum 1 hr interval between quiz attempts. *Violating the minimum interval will result in your receiving a zero for that quiz – no exceptions!*Questions for each quiz attempt are randomly drawn from a corresponding question bank, which has many more questions than the ten on an individual quiz , and the order of the multiple-choice answers within each question is randomized. Answers are not provided after each quiz attempt – only the final score on that attempt.

Discussion Forums (15% of lecture; 8.25% of overall course): Each module has a discussion forum in which you are to post a comment about the topic from this module that causes you the most confusion, including a summary of what confuses you, and/or something that you wish to know more about (i.e., beyond what is covered in the course materials, including textbook). This discussion item is graded on a 0-1-2 scale:

* **0**: No participation (this is also equivalent to just posting a topic name, e.g., “I am unclear about cloud formation”).
* **1:** Post lists a particular topic, but the discussion is weakly argued.
* **2:** The post is relevant, and the discussion is logically sound and clear.

Your comment must contain at least 250 characters. You may also earn up to one extra point per module for posting either an *additional* well-reasoned question or a robust answer to another student's question. After each module's discussion forum closes, I will respond to each student's post and create an announcement summarizing the most common issues for that module. Please note that *your posts must come before each module's quiz closure date!*

Final Project (15% of lecture; 8.25% of overall course): In the final project, you will be asked to write a short report on some weather-related topic of relevance to the material in this course. Detailed instructions and a rubric are provided in the [Final Project Description](https://uwmil.instructure.com/courses/212386/assignments/959912).

Extra Credit: There are two opportunities for extra credit in this course. First, as noted above, up to 1 (one) additional bonus point per module is available for high-level responses to another student’s comment. Here, a high-level response is defined as a logically sound, clear, and relevant answer to another student’s question. *Your response must come before the module’s due date in order to be considered for extra credit.*

You may also receive extra credit for attending meetings of the Greater Milwaukee Chapter of the American Meteorological Society. Up to three mid-week evening meetings, each on the UWM campus, will be held, and you may receive up to one percent on your final grade per meeting for attending and completing (*while at the meeting*) a short report about the presentation given at the meeting. Times, dates, and locations for these meetings will be announced via Canvas at least two weeks prior to the meeting.

Alternatively, if you cannot attend these meetings, you may receive extra credit for completing a one-page report on a topic related to that presented on at each meeting. You may receive up to one percent on your final grade per report. Each report’s prompt will be provided via Canvas during the week of the meeting, and you have exactly one week after it has been posted to submit the report to the appropriate Canvas dropbox. *You may not receive extra credit for both attending a meeting and completing a report on a related topic!*

Grading Scale:

|  |  |  |  |
| --- | --- | --- | --- |
| **A** 93.00-100% | **A-** 90.00-92.99% | **B+** 87.00-89.99% | **B** 83.00-86.99% |
| **B-** 80.00-82.99% | **C+** 77.00-79.99% | **C** 73.00-76.99% | **C-** 70.00-72.99% |
| **D+** 67.00-69.99% | **D** 63.00-66.99% | **D-** 60.00-62.99% | **F** 0-59.99% |

Text: *Meteorology: Understanding the Atmosphere (4th Edition)* by S. Ackerman and J. Knox.  This is a required text that will serve as the focal point for the course. Reference copies of the text have been placed on short-term reserve at the UWM Library.

**Supplemental Information**

Learning Objectives: This course and its accompanying lab carries Natural Sciences General Education Requirement + Lab designation. Thus, upon successful completion of this course, you will at a minimum be able to (1) understand and apply major concepts of a natural science discipline, including its breadth and its relationship to other disciplines; (2) demonstrate an understanding of the process of generating and testing data, and apply this knowledge to the solution of problems; and (3) discuss and assess the limitations of data and the possibility of alternative interpretations. In so doing, this class addresses University of Wisconsin System Shared Learning Goal 2, “Critical and Creative Thinking Skills including inquiry, problem solving, and higher-order qualitative and quantitative reasoning.” Your performance on each module quiz and laboratory assignment will be used to assess your progress toward meeting these criteria and goals.

Time Investment: The amount of time that an average student should expect to spend on this class is as follows:

* Time spent studying modules and completing the final project: 40 hours
* Time spent exploring supplemental material: 20 hours
* Time spent completing quizzes: 10 hours
* Time spent commenting/reading discussion boards: 20 hours
* Time spent reviewing module material after initial quiz attempts: 24 hours
* Time spent in lab/prepping for lab: 30 hours

Total time spent on this class: 144 hours

Important Dates:

|  |  |
| --- | --- |
| Last day to add classes or change sections: | September 16th |
| Last day to drop without a "W" on your transcript: | September 30th |
| Last day to drop with a "W" on your transcript: | November 10th |

Disability: Students with special needs have access to educational opportunities equal to those of non-special need students. To insure that reasonable accommodations can be made for students with special needs each student must identify themselves in a timely manner, preferably prior to the beginning of a term. However, if students are unsure of eligibility to receive accommodations and have not discussed this with a university representative, students should discuss these concerns with their instructor or advisor as early as possible.

Religious Observances: Students will be allowed to complete examinations or other requirements that are missed because of a religious observance.

Academic Misconduct: The University has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion of and representation of their work, for the appropriate citation of sources, and for respect of others’ academic endeavors. Further information may be found at:

[https://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/ (Links to an external site.)](https://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/)

Complaint Procedures: Students may direct complaints to the Atmospheric Science Program Chair (Prof. Clark Evans, EMS W401, evans36@uwm.edu) or Dept. of Mathematical Sciences Chair (Prof. Suzanne Boyd, EMS W404, sboyd@uwm.edu). If general, if the complaint regards a violation of a stated university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy.

Grade Appeals: A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides. These procedures are available in writing from the department chairperson or Academic Dean.

Sexual Harassment: Sexual harassment is reprehensible and will not be tolerated by the University. It subverts the mission of the University and threatens the careers, educational experience, and well-being of students, faculty, and staff. The University will not tolerate behavior between or among members of the University community that creates an unacceptable working environment.